DOCUMENT RESUME

ED 232 046 CE 036 559

| | |
|---|---|
| TITLE | Agricultural Processing and Marketing. Final Report. |
| INSTITUTION | James Madison Univ., Harrisonburg, Va. |
| SPONS AGENCY | Virginia State Dept. of Education, Richmond. Div. of Vocational Education. |
| PUB DATE | 15 Jun 83 |
| NOTE | 112p. |
| PUB TYPE | Reports - Descriptive (141) |
| EDRS PRICE | MF01/PC05 Plus Postage. |
| DESCRIPTORS | *Agricultural Education; Articulation (Education); Behavioral Objectives; Competence; *Competency Based Education; *Crop Processing Occupations; *Curriculum Development; Instructional Materials; *Marketing; *Material Development; Recordkeeping; Secondary Education; State Curriculum Guides; Vocational Education |
| IDENTIFIERS | Virginia |

ABSTRACT

A vocational guidance project was conducted in Virginia to identify a valid list of tasks/competencies for three levels of agricultural processing and marketing (AG-PAM) courses for secondary students. These competencies were then to be presented in a competency-based instructional resource guide for such courses. The project developers followed these steps: (1) contacted local school vocational administrators where AG-PAM is taught in order to establish sound communication and cooperation; (2) researched existing curriculum development efforts; (3) formed a committee with representatives from local agricultural businesses; (4) identified, sequenced, and determined the levels of difficulty of competencies for AG-PAM; (5) arranged competencies into logical teaching units and courses and developed course outlines; (6) constructed performance objectives, developmental competencies, and criterion-referenced tests; (7) listed appropriate learning activities, tools and materials, reference materials, and audiovisual materials needed for each competency or performance objective; (8) developed a format for a competency recordkeeping system; (9) developed an instructional management system; and (10) prepared a competency-based instructional resource guide for agricultural processing and marketing that is ready for review and processing by the Virginia Department of Education. It was concluded that contracting with a curriculum specialist to work cooperatively with an advisory committee is a practical approach to competency-based curriculum development and that this procedure should be used to develop additional curriculum materials. (KC)

**********
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
**********

ED232046

VA8213202

Final Report

# AGRICULTURAL PROCESSING AND MARKETING

A Vocational Guidance Project

Conducted Under

Vocational Education Amendments of 1976

Public Law 94-482

Charles W. Curry, Project Director

Ann Parsons, Curriculum Specialist

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☐ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

June 15, 1983

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

H L Smith

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

CE036559

This project was conducted in accordance with a contract with the Virginia Department of Education, Divisions of Vocational Education. Contractors undertaking projects under such sponsorship are encouraged to express freely their professional judgement in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Virginia Department of Education positions or policies.

TABLE OF CONTENTS


| | Page |
|---|---|
| ABSTRACT | vii |
| NARRATIVE | 1 |
| Title | 1 |
| Problem | 1 |
| Goals and Objectives | 1 |
| Project Design | 2 |
| Accomplishments | 3 |
| Evaluation | 7 |
| Conclusions, Implications and Recommendations | 7 |
| APPENDICES | |
| Appendix A - AG-PAM Advisory Committee Members | 9 |
| Appendix B - AG-PAM Advisory Committee Meeting Agenda June 24, 1982 | 13 |
| Appendix C - Suggestions, Comments and Recommendations of AG-PAM Advisory Committee | 17 |
| Appendix D - AG-PAM Advisory Committee Meeting Agenda April 29, 1983 | 21 |
| Appendix E - Evaluation Committee Members | 25 |
| Appendix F - Survey Instrument - Technical Content Areas | 27 |
| Appendix G - Survey Instrument - Employability Content Areas | 55 |
| Appendix H - Representative Occupations in Agricultural Processing and Marketing | 81 |
| Appendix I - Balance Sheet | 85 |

## ABSTRACT

TITLE - Agricultural Processing and Marketing (AG-PAM)

PROJECT DIRECTOR - Dr. Charles Curry

INSTITUTION - James Madison University

LOCATION - Department of Distributive and Industrial Education
108 Keezell Hall
James Madison University
Harrisonburg, VA 22807

FUNDING PERIOD - July 1, 1981 - June 30, 1982

OBJECTIVES OF PROJECT

1. To identify and/or develop a valid list of tasks/competencies for Agricultural Processing and Marketing III, IV, and V.
2. To develop a product titled Competency-Based Instructional Resource Guide - Agricultural Processing and Marketing.
3. To evaluate the product developed.

PROCEDURES OF IMPLEMENTATION

1. Contact local school division vocational administrators where AG-PAM is taught and establish sound communications and a commitment for cooperation.
2. Research existing curriculum development efforts in AG-PAM.
3. Form an Agricultural Processing and Marketing Advisory Committee with representatives from local agricultural processing and marketing businesses.
4. Identify the terminal competencies needed by students at the secondary level of instruction for AG-PAM.
5. Identify the occupational titles for AG-PAM.
6. Sequence competencies into a logical order for instruction.
7. Determine levels of difficulty for competencies.
8. Arrange competencies into logical teaching units and courses.
9. Develop course outlines.
10. Construct performance objectives.
11. Identify developmental competencies.
12. Construct criterion-referenced measures.
13. List appropriate learning activities for each competency.
14. List tools and materials needed to complete the performance objective.
15. List appropriate reference materials for each performance objective.
16. List appropriate audio-visual materials.
17. Develop a format for a competency recordkeeping system.
18. Develop instructional management system.
19. Prepare a Competency-Based Instructional Resource Guide - Agricultural Processing and Marketing.
20. Evaluate the final product.

## RESULTS/ACCOMPLISHMENTS

The resource guide titled Competency-Based Instructional Resource Guide - Agricultural Processing and Marketing, was researched, validated, written and edited. It is ready for review and processing by the Virginia Department of Education.

## EVALUATION

The completed guide was reviewed by the AG-PAM Advisory Committee. Changes were made where necessary.

## CONCLUSIONS, RECOMMENDATIONS

It is concluded that contracting with a curriculum specialist to work cooperatively with a technically competent advisory committee is a practical approach to competency-based curriculum development. It is recommended that this procedure be used to develop other curriculum materials for vocational education.

ANNUAL REPORT

NARRATIVE

Title: Agricultural Processing and Marketing (AG-PAM)

Problem: The standards of quality and objectives for public schools enacted by the Virginia General Assembly emphasize the importance of vocational education by stating that a goal of public education must be to enable each student, upon leaving school, to successfully enter the world of work or to continue in a program of advanced education. The goal further stated that each school division shall provide programs acceptable to the Board of Education that offer vocational education providing marketable skills for students who are not planning to continue their education beyond high school and that those students not completing their public school education possess the basic skills and attitudes commensurate with their capabilities to obtain employment upon leaving school.

One of the objectives in the Virginia State Plan for Vocational Education states that:

> By June 30, 1982, each school division shall have implemented competency-based education in approved vocational education programs based on V-TECS and IDECC catalogs, if available, or other competency-based materials as reported in the annual local evaluation of vocational education programs.

The State Plan also has the objective to identify by June 30, 1982, projects to implement competency-based education in occupational programs not included in the current CBE and Articulation projects.

Goals and Objectives:

1. To identify and/or develop a valid list of tasks/competencies for Agricultural Processing and Marketing III, IV, and V.
2. To develop a product titled, Competency-Based Instructional Resource Guide - Agricultural Processing and Marketing (AG-PAM)
3. To evaluate the product developed.

Project Design: The Agricultural Processing and Marketing (AG-PAM) project was designed to fit into the curriculum coordination procedure already established by project PAVE. The same model was adapted and used for the Agricultural Processing and Marketing (AG-PAM) Project. The following procedures were used:

1. Contact local school division vocational administrators where AG-PAM is taught and establish sound communications and a commitment for cooperation.
2. Research existing curriculum development efforts in AG-PAM.
3. Form an Agricultural Processing and Marketing Advisory Committee with representatives from local agricultural processing and marketing businesses.
4. Identify the terminal competencies needed by students at the secondary level of instruction for AG-PAM.
5. Identify the occupational titles for AG-PAM.
6. Sequence competencies into a logical order for instruction.
7. Determine levels of difficulty for competencies.
8. Arrange competencies into logical teaching units and courses.
9. Develop course outlines.
10. Construct performance objectives.
11. Identify developmental competencies.
12. Construct criterion-referenced measures.
13. List appropriate learning activities for each competency.
14. List tools and materials needed to complete the performance objectives.
15. List appropriate reference materials for each performance objective.
16. List appropriate audio-visual materials.
17. Develop a format for a competency recordkeeping system.
18. Develop instructional management system.
19. Prepare a Competency-Based Instructional Resource Guide - Agricultural Processing and Marketing.
20. Evaluate the final product using procedures in evaluation section.

The primary target population for this project included all secondary agriculture students enrolled in Agricultural Processing and Marketing. Certain students enrolled in Agricultural Business will also benefit from placements in agricultural processing and marketing businesses.

The indirect target population for this project included vocational administrators and agriculture teachers who supervise and provide instruction in Agricultural Processing and Marketing.

The following timetable was established for implementation of the project:

Organization - July 1, 1081 - September 30, 1981
Identify and Validate Competency List - October 1, 1981 - June 30, 1982
Prepare Section II of guide - March 1, 1982 - March 31, 1983
Prepare Section III of guide - March 1, 1983 - April 30, 1983
Prepare Sections IV, V, VI of guide - September 1, 1981 - June 30, 1983

The curriculum (performance objectives, enabling objectives, criterion-referenced measures, instructional activities, tools and equipment, references and audio-visuals) were developed using a new model called performance contracting. The project contracted with an agricultural education graduate student to write the curriculum.

Accomplishments:

Procedure #1 -

A school division where a course in processing and marketing is taught has been identified, contact was established with the teacher, and an agreement obtained for service on the advisory committee. Also, local schools which place students in agricultural processing and marketing businesses were identified, the teachers contacted, and agreements obtained for service on the advisory committee.

Procedure #2 -

Existing curriculum development efforts were used to develop a tentative job task inventory. A COMSEARCH and MEMS search (conducted by the Marine Education Center - Gloucester Point) were conducted and some of the materials available used in the research for establishing the tentative job list.

Procedure #3 -

An Agricultural Processing and Marketing Advisory Committee was formed with representatives from local agricultural processing and marketing businesses and from local school divisions. In addition, the Advisory Committee had representatives from state AG-PAM businesses and from another school division, in order to accurately represent AG-PAM businesses throughout Virginia. Appendix A contains a list of the Advisory Committee members. The first organizational meeting was held June 24, 1982. (See Appendix B for a copy of the agenda of this dinner/meeting.) Suggestions, comments, and recommendations made by committee members are summarized in Appendix C.

The second Advisory Committee meeting was held on April 29, 1983 (Appendix D). Each section of the resource guide was reviewed and suggestions for improvement were made. Several changes in technical terminology were made as a result of this meeting, and one duty area was eliminated.

Procedure #4 -

A tentative competency list was developed and given to Advisory Committee members for evaluation; in addition, lists were sent to suggested people from industry and education for evaluation (people were suggested by each Advisory Committee member). A copy of this group of people is in Appendix D.

Industry representatives evaluated the task list using criteria based on occupational needs, while educational representatives evaluated the list using criteria related to classroom instruction. See Appendix E for a copy of the task list and evaluation criteria given to industry representatives; Appendix G for a copy of the task list and evaluation criteria used by the committee members in education. (These same tasks lists and evaluation criteria were mailed to other people in industry and education.)

Procedure #5 -

Occupational titles for AG-PAM have been identified and sent to Arlington for development into an occupational information section; these titles are listed in Appendix H. Arlington was no longer prepared to construct the occupational information section of the guide as indicated in the proposal. This section was developed by the project staff.

Procedure #6 -

A task/competency sequence chart was developed which lists the tasks in sequence for each grade level.

Procedure #7 -

Members of the Advisory Committee representing education evaluated the competency list according to level of difficulty. These evaluations were analyzed by computer to determine appropriate levels. See Appendix G for a copy of the task list and evaluation criteria used by the committee members in education and by other educational representatives.

Procedures #8 and #9 -

The tasks were further organized into course outlines which list the enabling objectives associated with each task.

Procedure #10 -

Performance objectives were written for each terminal competency which received a rating of 1.3 or lower on importance.

Procedure #11 -

Enabling objectives (developmental competencies) were written for each terminal competency.

Procedure #12 -

Criteria referenced measures were written for each terminal competency.

Procedure #13 -

Suggested learning activities were written for each terminal competency.

Procedure #14 -

Tools and materials needed to complete each performance objective were listed.

Procedure #15 -

Reference materials were collected from many different sources to develop a listing of resources available to teachers. Instructional materials in the area of Agricultural Processing and Marketing are somewhat limited.

Procedure #16 -

Audio-visual materials were identified and listed. Few audio-visual materials are available in Agricultural Processing and Marketing.

Procedure #17 -

A competency-based recordkeeping form was developed.

Procedure #18 -

A model instructional management system was developed.

Procedure #19 -

The name of the instructional guide has been changed from Agricultural Marketing and Processing to Agricultural Processing and Marketing, in order to recognize the logical sequence involved in taking raw materials, processing them, and then marketing the processed product. In addition, definitions are included to properly identify what is meant by the terms "processing" and "marketing."

Procedure #20 -

The validation team and project consultants were asked to review the products periodically as they were developed.

Evaluation: The project consultant was responsible to evaluate the product for the Virginia Department of Education. His schedule did not allow him to attend all project meetings. An attempt was made to follow the recommendations of the validation team and project consultant.

Conclusions; Implications and Recommendations: It was concluded that there is only one Agricultural Processing and Marketing program in Virginia. Other programs, such as Agricultural Business, place some students in processing or marketing training stations. Input from the validation team indicated that basic knowlege in reading, science, math, animal science, plant science and employability skills were the most important content areas to be taught.

It was further concluded that industrial representatives are supportive of agricultural programs and willing to commit their time and efforts to assist curriculum projects. Scheduling meetings for these busy persons is difficult, however.

It is recommended that other school divisions give consideration to establishing Agricultural Processing and Marketing programs. Technical knowledge and skills should be taught using the cooperative method of training.

APPENDIX A

## AG-PAM
## ADVISORY COMMITTEE MEMBERS

**Dairy**

Carl Wassum
Plant Manager
Shenandoah's Pride Dairy
41 W Washington Street
Harrisonburg, VA 22801
ph. (703) 434-7328

**Fruits and Vegetables**

Edward J. Keenan
Corporate Personnel
Safety Director
National Fruit and Product
Company, Inc.
P.O. Box 2040
Winchester, VA 22601
ph. (703) 662-3401

**Grain**

Thomas R. Yates
Assistant Director
Division of Marketing
P.O. Box 1163
Richmond, VA 23209
ph. (804) 786-3944

**Meats**

Robert Kelly
Professor
Food Science and Technology
VPI & SU
Blacksburg, VA 24061
ph. (703) 961-6876

**Poultry and Eggs**

Ben Getz
Public Relations and
Sales Representative
Rockingham Poultry
Broadway, VA 22815
ph. (703) 896-7001

**Seafood**

Tom Rippen
Food Technologist
Seafood Processing Research and
Extension Unit
P.O. Box 369
Hampton, VA 23669
ph. (804) 564-3122

**Tobacco**

Carson Tucker
Manager of Management/
Development Division
Philip Morris
P.O. Box 26603
Richmond, VA 23261
ph. (804) 274-3404

**Agricultural Education Teachers**

R. Z. Arey
Turner Ashby High School
375 Bowman
Dayton, VA 22821
ph. (703) 879-2511

Linda Burgess
Axton Elementary School
Rt. 1
Axton, VA 24054
ph. (703) 650-3838

Dennis Smith
Broadway High School
Broadway, VA 22815
ph. (703) 896-7081

**Educational Consultant**

O. Beverley Roller
Supervisor-
Agricultural Education
Box 207
Bridgewater, VA 22812
ph. (703) 828-3977

APPENDIX B

# AG PAM
# PROGRAM ADVISORY COMMITTEE

Belle Meade Restaurant
US Rt 11
Harrisonburg, Virginia
June 24, 1982

**Presiding: Charles W. Curry**
**Project Director**

Introductions

Invocation

Dinner

Introduction to
Agricultural Processing and Marketing
Curriculum Project

Development of
Agricultural Processing and Marketing
Competency List

Discussion

Administrative Details

Adjournment

## menu

tossed garden salad
Junior cut 8oz. strip steak
green beans w/almonds
baked potato
dinner roll w/ butter
Apple pie w/ ice cream
coffee, tea

AG-PAM PROJECT Department of Distributive and Industrial Education James Madison University

APPENDIX C

SUGGESTIONS, COMMENTS, AND RECOMMENDATIONS

AG-PAM Advisory Committee

June 24, 1982

-- Include a listing which would indicate the location of each industry within the state or would list industries by geographical areas within the state

-- Indicate that some type of chemistry/biology background is desirable (knowledge of bacteria counting needed for lab technician type job)

-- Include basic competence in understanding how equipment works (more than operating or basic maintenance; understanding of blueprints)

-- Cross reference mechanics tasks to agricultural mechanics instructional resource guide

-- Include tasks in communications skills

-- Training is not necessary in the actual processing but rather background knowledge; employability skills and human relations skills (background knowledge includes cuts of meat, products, sanitation, and quality control)

-- Include tasks on check writing

-- Include tasks on micro processor operation

-- Create a separate marketing section which is general

-- Include a section on infectious diseases

APPENDIX D

AG-PAM Program Advisory Committee

Belle Meade Restaurant US Rt 11 Harrisonburg Virginia April 29 1983
Presiding: Charles W. Curry Project Director

Introductions
Invocation
Dinner
Update of Agricultural Processing and Marketing Curriculum Project
Review of Task List
Discussion
Administrative Details
Adjournment

Menu
tossed garden salad chicken cordon bleu baked potato broccoli
dinner roll w/ butter sherbet coffee, tea



AG-PAM PROJECT Department of Distributive and Industrial Education James Madison University



**Dairy**

Carl Wassum
Plant Manager
Shenandoah's Pride Dairy
41 W Washington Street
Harrisonburg, VA 22801
ph. (703) 434-7328

**Fruits and Vegetables**

Edward J. Keenan
Corporate Personnel
Safety Director
National Fruit and Product
Company, Inc.
P.O. Box 2040
Winchester, VA 22601
ph. (703) 662-3401

**Grain**

Thomas R. Yates
Assistant Director
Division of Marketing
P.O. BOx 1163
Richmond, VA 23209
ph. (804) 786-3944

**Meats**

Robert Kelly
Professor
Food Science and Technology
VPI & SU
Blacksburg, VA 24061
ph. (703) 961-6876

**Poultry and Eggs**

Ben Getz
Public Relations and
Sales Representative
Rockingham Poultry
Broadway, VA 22815
ph. (703) 896-7001

**Seafood**

Tom Rippen
Food Technologist
Seafood Processing Research and
Extension Unit
P.O. Box 369
Hampton, VA 23669
ph. (804) 564-3122

**Tobacco**

Carson Tucker
Manager of Management/
Development Division
Philip Morris
P.O. Box 26603
Richmond, VA 23261
ph. (804) 274-3404

**Agricultural Education Teachers**

R. Z. Arey
Turner Ashby High School
375 Bowman
Dayton, VA 22821
ph. (703) 879-2511

Linda Burgess
Axton Elementary School
Rt. 1
Axton, VA 24054
ph. (703) 650-3838

Dennis Smith
Broadway High School
Broadway, VA 22815
ph. (703) 896-7081

**Educational Consultant**

O. Beverley Roller
Supervisor-
Agricultural Education
Box 207
Bridgewater, VA 22812
ph. (703) 828-3977

APPENDIX E

EVALUATION COMMITTEE
RECOMMENDED BY AG-PAM ADVISORY COMMITTEE

1. Mr. John Huffman
   Plant Manager
   Rockingham Poultry Coop
   Broadway, Virginia 22815

2. Mr. Royce Hammer
   USDA Grader
   Shen-Dutch Foods, Inc.
   Dayton, Virginia 22821

3. Dr. Cooler
   Dept. of Food Science and Technology
   VPI & SU
   Blacksburg, Virginia 24061

4. Mr. Tony Dillow
   D.E. Instructor
   Laurel Park High School
   Route 8
   Box 165
   Martinsville, Virginia 24112

5. Mr. Charles B. Wood
   Associate Professor
   Dept. of Food Science and Technology
   VPI & SU
   Blacksburg, Virginia 24061

6. Dr. Dick L. Boyd
   Marvel Poultry
   Dayton, Virginia 22321

7. Mr. Harvey H. Scott
   General Manager
   Valley of Virginia Milk Producers Assoc.
   41 W. Washington Street
   Harrisonburg, Virginia 22801

8. Dr. W. F. Collins
   Dept. of Food Science and Technology
   VPI & SU
   Blacksburg, Virginia 24061

9. Mr. Adolph Ackerman
   General Manager
   Shen-Valley Meat Packers
   Timberville, Virginia 22853

10. Mr. Jim McNeil
    Marvel of Virginia
    Dayton, Virginia 22821

11. Mr. Frank Blankenmeyer
    General Manager
    Valleydale Packers, Inc.
    Salem, Virginia 24153

12. Mr. James C. Zombro
    National Fruit and
    Product Co., Inc.
    P.O. Box 2040
    Winchester, Virginia
    22601

13. Mr. Donald Smallwood
    Plant Manager
    National Fruit and
    Product Co., Inc.
    P.O. Box 916
    Lincolnton, North Carolina
    28092

14. Mr. Verlis Miller
    Production Manager
    National Fruit and
    Product Co., Inc.
    Winchester, Virginia
    22601

15. Dr. Donn Ward
    Specialist, Food Technology
    Seafood Processing Research
    and Extension Unit
    P.O. Box 369
    Hampton, Virginia 23669

16. Mr. Granston Morgan
    W. F. Morgan and Sons, Inc.
    Weems, Virginia 22576

17. Mr. Jack Miles
    J. H. Miles and Co., Inc.
    P.O. Box 178
    Southampton Ave.
    Norfolk, Virginia 23501

18. Mr. William P. Barlow
    Vocational-Education
    Coordinato--
    Adult Education
    Isle of Wight County
    Virginia 23397

19. Mr. Bert Kite
Blue Ridge Community College
Weyers Cave, Virginia 24486

20. Mr. C. R. Payne
Manager of Technical Training
Philip Morris
Box 26603
Richmond, Virginia 23261

21. Mr. M. J. Rideout
E.W.I.
Philip Morris, USA
Box 26603
Richmond, Virginia 23261

22. Mr. Randy Griffin
Ligget & Meyes Tobacco Co.
Production Supervisor
Durham, North Carolina 27702

23. Mr. John Huffman
Plant Manager
Rockingham Poultry Market Coop, Inc.
Broadway, Virginia 22815

24. Mr. Hobart Harvey
Holly Farms, Inc.
Harrisonburg, Virginia 22801

APPENDIX F

CONTENT/CONCEPT AREAS

1. Choosing and entering a career in agricultural processing and marketing

2. Developing human relations skills for a career in agricultural processing and marketing

3. Managing an agricultural processing and marketing business

4. Advertising and promoting an agricultural processed product

5. Applying legal aspects of agricultural processing and marketing

6. Processing and marketing of meats and poultry

7. Processing and marketing of seafood

8. Processing and marketing of fruits and vegetables, including peanuts

9. Processing and marketing of milk and milk products

10. Processing and marketing of shell eggs

11. Insuring quality control in field crop processing (corn, grain, soybeans)

12. Processing and marketing of tobacco

13. Applying general knowledge of agricultural processing and marketing

Please evaluate the following tasks using the criteria and numbers listed below

CHOOSING AND ENTERING A CAREER IN AGRICULTURAL PROCESSING AND MARKETING

| | | | | |
|---|---|---|---|---|
| A | Importance of competency | 1 very | 2 somewhat | 3 not |
| B | Frequency of competency | 1 very | 2 average | 3 not |
| C | Is this skill necessary for entry-level employment? | 1 yes | 2 do not know | 3 no |
| D | Is this skill necessary for advancement? | 1 yes | 2 do not know | 3 no |

| Tasks | Importance | Frequency | Entry Job | Advancement |
|---|---|---|---|---|
| 1.1 Describe the nature and scope of the agricultural processing and marketing industry | | | | |
| 1.2 Determine the relationship of the processing and marketing industry to the producer, consumer, total economy, and foreign trade | | | | |
| 1.3 Outline employment trends and opportunities | | | | |
| 1.4 Identify broad occupational areas and several specific jobs available within each area | | | | |
| 1.5 Identify educational or training requirements needed for employment in a specific job | | | | |
| 1.6 Compare wage rates with those of other businesses | | | | |
| 1.7 Identify personal long-range and short-term goals | | | | |
| 1.8 Select a tentative occupation | | | | |
| 1.9 Write a letter of application | | | | |
| 1.10 Complete a job application | | | | |
| 1.11 Construct a personal data sheet or resume | | | | |
| 1.12 Participate in a personal interview | | | | |
| 1.13 Write a follow-up letter of appreciation | | | | |
| 1.14 Complete a placement agreement | | | | |
| 1.15 | | | | |

Please add any tasks that you wish if you feel something is missing or not adequately covered.

[redacted] [redacted]ease [redacted]uat[redacted] fol[redacted]ng t[redacted]usi[redacted]e cr[redacted]a a[redacted]mber[redacted]sted[redacted]w [redacted]

DEVELOPING HUMAN RELATIONS SKILLS FOR A CAREER IN AGRICULTURAL PROCESSING AND MARKETING

| | | | | |
|---|---|---|---|---|
| A | Importance of competency | 1 very | 2 somewhat | 3 not |
| B | Frequency of competency | 1 very | 2 average | 3 not |
| C | Is this skill necessary for entry-level employment? | 1 yes | 2 do not know | 3 no |
| D | Is this skill necessary for advancement? | 1 yes | 2 do not know | 3 no |

| Tasks | Importance | Frequency | Entry Job | Advancement |
|---|---|---|---|---|
| 2.1 Identify human relations skills required for entry into an agricultural processing and marketing job | | | | |
| 2.2 Recognize physical requirements needed in various aspects of the processing industry | | | | |
| 2.3 Demonstrate ability to follow instructions of supervisors | | | | |
| 2.4 Demonstrate willingness to work | | | | |
| 2.5 Conduct self-evaluation | | | | |
| 2.6 Demonstrate ability to communicate orally and in writing with employer, follow employees, supervisor, and customers | | | | |
| 2.7 Identify the basic human needs which play a part in worker motivation | | | | |
| 2.8 Make a decision, using the decision-making process | | | | |
| 2.9 Define and recognize the importance of etiquette | | | | |
| 2.10 Maintain effective relations with fellow employees, employer, and supervisor | | | | |
| 2.11 Maintain effective supervisory relations with employees | | | | |
| 2.12 List positive work attitudes | | | | |
| 2.13 Describe a typical agricultural processing work situation | | | | |
| 2.14 | | | | |
| | | | | |

Please add any tasks that you wish if you feel something is missing or not adequately covered.

33

Please evaluate the following tasks using the criteria and numbers listed below

## MANAGING AN AGRICULTURAL PROCESSING AND MARKETING BUSINESS

| | | | | |
|---|---|---|---|---|
| A | Importance of competency | 1 very | 2 somewhat | 3 not |
| B | Frequency of competency | 1 very | 2 average | 3 not |
| C | Is this skill necessary for entry-level employment? | 1 yes | 2 do not know | 3 no |
| D | Is this skill necessary for advancement? | 1 yes | 2 do not know | 3 no |

| Tasks | Importance | Frequency | Entry Job | Advancement |
|---|---|---|---|---|
| 3.1 Determine the proper organization of a business | | | | |
| 3.2 Perform general office duties | | | | |
| a. Inventory processed products and supplies | | | | |
| b. Order merchandise sold in salesroom | | | | |
| c. Record information | | | | |
| d. Fill out shipping forms | | | | |
| e. Keep employment records | | | | |
| f. Prepare requisitions | | | | |
| g. Keep accurate records for an ag pam business | | | | |
| h. Write business letters | | | | |
| i. Illustrate importance of keeping an organized filing system | | | | |
| j. Keep an organized filing system | | | | |
| k. Interpret a financial statement | | | | |
| l. Apply principles of double-entry bookkeeping | | | | |
| m. Maintain field inspection reports | | | | |
| n. Demonstrate ability to adjust to changes in general work routine | | | | |
| 3.3 Develop a financial plan for an agricultural processing and marketing business | | | | |
| a. Prepare a complete income and expense budget | | | | |

Please add any tasks that you wish if you feel something is missing or not adequately covered.

Please evaluate the following tasks using the criteria and personalized [illegible]

| | | | | |
|---|---|---|---|---|
| A | Importance of competency | 1 very | 2 somewhat | 3 not |
| B | Frequency of competency | 1 very | 2 average | 3 not |
| C | Is this skill necessary for entry-level employment? | 1 yes | 2 do not know | 3 no |
| D | Is this skill necessary for advancement? | 1 yes | 2 do not know | 3 no |

| Tasks | Importance | Frequency | Entry Job | Advancement |
|---|---|---|---|---|
| b. List the various methods of payment for work (hourly, piece, salary) | | | | |
| c. List several (monetary) fringe benefits in addition to normal wages or salaries | | | | |
| d. Explain how the credit policies of a company affect its business | | | | |
| e. Handle money | | | | |
| f. Account for money in cash registers and obtain additional change as needed | | | | |
| g. Borrow money | | | | |
| h. Identify facility needs for an ag pam business | | | | |
| i. Determine insurance needs | | | | |
| j. List real estate tax regulations | | | | |
| k. Establish retail prices for ag processed products | | | | |
| l. Analyze a business and rate financial soundness | | | | |
| m. Use hedging techniques to protect business profits | | | | |
| n. List taxation laws of a) individual ownership of a business | | | | |
| b) partnership c) business corporation | | | | |
| 3.4 Perform appropriate salesroom duties | | | | |
| a. Supervise sale of products retailed through processing | | | | |

Please add any tasks that you wish if you feel something is missing or not adequately covered.

Please evaluate the following tasks using the criteria and numbers listed below

MANAGING AN AGRICULTURAL PROCESSING AND MARKETING BUSINESS

| | | | | |
|---|---|---|---|---|
| A | Importance of competency | 1 very | 2 somewhat | 3 not |
| B | Frequency of competency | 1 very | 2 average | 3 not |
| C | Is this skill necessary for entry-level employment? | 1 yes | 2 do not know | 3 no |
| D | Is this skill necessary for advancement? | 1 yes | 2 do not know | 3 no |

| Tasks | Importance | Frequency | Entry Job | Advancement |
|---|---|---|---|---|
| plants salesroom | | | | |
| b. Check equipment in salesroom and report malfunctions and service requirements to the maintenance engineer or plant superintendent | | | | |
| c. Supervise cleaning of salesroom and equipment | | | | |
| d. Supervise packaging, storage, and display of processed products | | | | |
| e. Assist with serving of retail customers | | | | |
| f. Contact customers and make sales | | | | |
| g. Demonstrate skills necessary for sales | | | | |
| h. Write out a sales ticket or receipt | | | | |
| 3.5 Demonstrate supervisory skills | | | | |
| a. Determine personnel requirements | | | | |
| b. Interview and select employees | | | | |
| c. Train new personnel | | | | |
| d. Supervise and schedule workers for the operation of the salesroom | | | | |
| e. Evaluate employees performance | | | | |
| f. Formulate daily objectives for organization and distribution of manpower, equipment, facilities, and goods | | | | |
| g. Lay out a weekly schedule of activities for an employee | | | | |

Please add any tasks that you wish if you feel something is missing or not adequately covered.

Please evaluate the following tasks using the criteria and numbers listed below

| | | | | |
|---|---|---|---|---|
| A | Importance of competency | 1 very | 2 somewhat | 3 not |
| B | Frequency of competency | 1 very | 2 average | 3 not |
| C | Is this skill necessary for entry-level employment? | 1 yes | 2 do not know | 3 no |
| D | Is this skill necessary for advancement? | 1 yes | 2 do not know | 3 no |

| Tasks | Importance | Frequency | Entry Job | Advancement |
|---|---|---|---|---|
| h. Maintain working conditions under existing contract agreements | | | | |
| i. Enforce employee safety regulations and standards | | | | |
| j. Instruct and direct work of employees in the production, packaging, and storing of processed products | | | | |
| 3.6 Receive and follow daily markets for a particular commodity | | | | |
| 3.7 Describe features and limitations of processed products | | | | |
| a. Describe uses of processed products | | | | |
| b. Describe and analyze markets available for products | | | | |
| 3.8 Select shipping method for various processed products | | | | |
| a. Explain advantages and disadvantages of different types of freight using freight rates and schedules | | | | |
| b. Determine most economical and efficient means of transportation | | | | |
| c. Inspect car or truck to determine acceptability | | | | |
| d. Recognize problems associated with transporting a) perishables b) semi-processed goods c) processed goods | | | | |
| e. Interpret shipping and postal rates and instructions | | | | |
| f. Prepare and load rail cars and trucks | | | | |
| g. Adjust cooling or freezing equipment (adjust temp. controls) to proper settings when necessary | | | | |

Please add any tasks that you wish if you feel something is missing or not adequately covered.

Please evaluate the following tasks using the criteria and numbers listed below

MANAGING AN AGRICULTURAL PROCESSING AND MARKETING BUSINESS

| | | | | |
|---|---|---|---|---|
| A | Importance of competency | 1 very | 2 somewhat | 3 not |
| B | Frequency of competency | 1 very | 2 average | 3 not |
| C | Is this skill necessary for entry-level employment? | 1 yes | 2 do not know | 3 no |
| D | Is this skill necessary for advancement? | 1 yes | 2 do not know | 3 no |

| Tasks | Importance | Frequency | Entry Job | Advancement |
|---|---|---|---|---|
| h. Interpret freight rates for transportation of product | | | | |
| i. Prepare a bill of lading | | | | |
| 3.9 Develop a plan to organize a cooperative | | | | |
| a. Develop a plan for financing cooperative | | | | |
| b. List the various taxation laws of a cooperative | | | | |
| 3.10 | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

38

39

40

Please add any tasks that you wish if you feel something is missing or not adequately covered.

[redacted] [redacted]leas[redacted]luat[redacted]e fo[redacted]ng [redacted] usi[redacted]e c[redacted]dia a[redacted]mbe[redacted]sted[redacted]ow [redacted] A[redacted]TIS[redacted]AND[redacted]MOT[redacted] A [redacted]ESS[redacted] [redacted]

AGRICULTURE PRODUCT

| | | | | |
|---|---|---|---|---|
| A | Importance of competency | 1 very | 2 somewhat | 3 not |
| B | Frequency of competency | 1 very | 2 average | 3 not |
| C | Is this skill necessary for entry-level employment? | 1 yes | 2 do not know | 3 no |
| D | Is this skill necessary for advancement? | 1 yes | 2 do not know | 3 no |

| Tasks | Importance | Frequency | Entry Job | Advancement |
|---|---|---|---|---|
| 4.1 Demonstrate ability to project desirable image for the firm | | | | |
| 4.2 Develop an advertising campaign using various media | | | | |
| 4.3 Prepare an advertising calendar | | | | |
| 4.4 Develop an advertising budget | | | | |
| 4.5 Analyze advertising needs of the business | | | | |
| 4.6 Explain major concepts used in advertising and promoting a product | | | | |
| 4.7 List business promotion activities | | | | |
| 4.8 Plan and construct a basic display for a specific product | | | | |
| 4.9 Identify manufacturer's and wholesaler's promotional programs | | | | |
| 4.10 Identify and explain federal regulations pertaining to advertising of processed products | | | | |
| 4.11 | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

Please add any tasks that you wish if you feel something is missing or not adequately covered.

Please evaluate the following tasks using the criteria and numbers listed below

## APPLYING LEGAL ASPECTS OF AGRICULTURAL PROCESSING AND MARKETING

| | | | | |
|---|---|---|---|---|
| A | Importance of competency | 1 very | 2 somewhat | 3 not |
| B | Frequency of competency | 1 very | 2 average | 3 not |
| C | Is this skill necessary for entry-level employment? | 1 yes | 2 do not know | 3 no |
| D | Is this skill necessary for advancement? | 1 yes | 2 do not know | 3 no |

| Tasks | Importance | Frequency | Entry Job | Advancement |
|---|---|---|---|---|
| 5.1 Explain the role of unions in an agricultural processing and marketing business | | | | |
| 5.2 List and explain the five major areas in the Fair Labor Standards Act | | | | |
| 5.3 Explain the U.S. Food, Drug, and Cosmetic Act as it relates to processing food products | | | | |
| 5.4 Describe standards for packaging and labeling food products | | | | |
| 5.5 List and describe other major federal regulations which apply to commercial processing and handling of food products | | | | |
| 5.6 List and describe major federal regulations which apply to the tobacco industry | | | | |
| 5.7 Interpret government regulations of warehousing | | | | |
| 5.8 Explain specific federal and state obligations which an employer has to an employee | | | | |
| 5.9 List employee incentives and fringe benefits | | | | |
| 5.10 | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

Please add any tasks that you wish if you feel something is missing or not adequately covered.

Please evaluate the following tasks using the criteria and numbers listed below.

| | | | | |
|---|---|---|---|---|
| A | Importance of competency | 1 very | 2 somewhat | 3 not |
| B | Frequency of competency | 1 very | 2 average | 3 not |
| C | Is this skill necessary for entry-level employment? | 1 yes | 2 do not know | 3 no |
| D | Is this skill necessary for advancement? | 1 yes | 2 do not know | 3 no |

| Tasks | Importance | Frequency | Entry Job | Advancement |
|---|---|---|---|---|
| 6.1 Identify proper methods and procedures for handling animals/ poultry prior to slaughter | | | | |
| 6.2 Perform antemortem inspection conforming to USDA regulations | | | | |
| 6.3 Grade slaughter cattle, calves, lambs, hogs, and poultry | | | | |
| 6.4 Select/maintain equipment and supplies necessary for slaughter | | | | |
| 6.5 Demonstrate proper use of equipment in slaughtering process | | | | |
| 6.6 List safety practices that pertain to use of equipment | | | | |
| 6.7 Describe slaughtering process for cattle, calves, lambs, hogs, poultry according to USDA regulations | | | | |
| 6.8 Perform postmortem inspection of beef, veal, lamb, swine, and poultry carcasses conforming to USDA regulations | | | | |
| 6.9 Describe procedure to dress carcass for cattle, calves, lambs, hogs, and poultry | | | | |
| 6.10 Explain procedure to process carcass of cattle, calves, lambs, hogs, and poultry into retail cuts according to USDA regulations | | | | |
| 6.11 Inspect and grade beef, veal, lamb, mutton, pork, and poultry carcasses according to USDA regulations | | | | |
| 6.12 Identify various by-products of slaughtering processes and their uses | | | | |
| 6.13 Explain secondary processing procedure for ground and ready-to- | | | | |

Please add any tasks that you wish if you feel something is missing or not adequately covered.

Please evaluate the following tasks using the criteria and numbers listed below

| | | | | |
|---|---|---|---|---|
| A | Importance of competency | 1 very | 2 somewhat | 3 not |
| B | Frequency of competency | 1 very | 2 average | 3 not |
| C | Is this skill necessary for entry-level employment? | 1 yes | 2 do not know | 3 no |
| D | Is this skill necessary for advancement? | 1 yes | 2 do not know | 3 no |

| Tasks | Importance | Frequency | Entry Job | Advancement |
|---|---|---|---|---|
| serve meats, bacon, hams, sausages, etc. | | | | |
| 6.14 Describe various methods of meat and poultry preservation | | | | |
| 6.15 Package and label meat and poultry according to USDA regulations | | | | |
| 6.16 Receive meat and poultry shipments | | | | |
| a. Display and sell meats and poultry | | | | |
| b. Inventory meats and poultry | | | | |
| c. Purchase meats and poultry supplies | | | | |
| d. Determine proper storage techniques | | | | |
| 6.17 Describe procedures to sanitize meat slaughter and poultry | | | | |
| slaughter facilities according to USDA regulations (Sanitation | | | | |
| Handbook) | | | | |
| 6.18 Complete a sanitation report in triplicate in accordance with | | | | |
| the Sanitation Handbook of the USDA | | | | |
| 6.19 Describe the procedure to slaughter and process cattle and lambs | | | | |
| according to Jewish law | | | | |
| 6.20 Define terms used in the processing and marketing of meat and | | | | |
| poultry | | | | |
| 6.21 | | | | |
| | | | | |
| | | | | |

42

17

18

Please add any tasks that you wish if you feel something is missing or not adequately covered.

[redacted] [redacted]ease [redacted]uate [redacted] fol[redacted]g ta[redacted]usin[redacted] cr[redacted]a ar[redacted]ber[redacted]ted [redacted]w [redacted]

| | | | | |
|---|---|---|---|---|
| A | Importance of competency | 1 very | 2 somewhat | 3 not |
| B | Frequency of competency | 1 very | 2 average | 3 not |
| C | Is this skill necessary for entry-level employment? | 1 yes | 2 do not know | 3 no |
| D | Is this skill necessary for advancement? | 1 yes | 2 do not know | 3 no |

| Tasks | Importance | Frequency | Entry Job | Advancement |
|---|---|---|---|---|
| 7.1 Identify various types of fin fish and shell fish common to Virginia | | | | |
| 7.2 Receive seafood shipment | | | | |
| a. Display and sell seafood | | | | |
| b. Inventory seafood | | | | |
| c. Purchase seafood supplies | | | | |
| d. Determine proper storage techniques | | | | |
| 7.3 Identify various types of fish cuts | | | | |
| 7.4 Describe procedure to prepare fish for processing into retail cuts | | | | |
| 7.5 Identify by-products of fish processing and their uses | | | | |
| 7.6 Package and label fish according to U.S. Department of Commerce (USDC) regulations | | | | |
| 7.7 Describe various methods of fish preservation | | | | |
| 7.8 Describe procedure to sanitize facilities, according to federal, state, and local regulations | | | | |
| 7.9 Inspect and grade fish according to USDC regulations | | | | |
| 7.10 Describe USDC regulations pertaining to the processing of seafood | | | | |
| 7.11 Describe the various fishery inspections available to a processing plant | | | | |
| 7.12 Define terms used in the processing and marketing of seafood | | | | |

Please add any tasks that you wish if you feel something is missing or not adequately covered.

Please [redacted] following ta[redacted] using the crit[redacted]a and [redacted]bers indicated below [redacted]

| | | | | |
|---|---|---|---|---|
| A | Importance of competency | 1 very | 2 somewhat | 3 not |
| B | Frequency of competency | 1 very | 2 average | 3 not |
| C | Is this skill necessary for entry-level employment? | 1 yes | 2 do not know | 3 no |
| D | Is this skill necessary for advancement? | 1 yes | 2 do not know | 3 no |

| Tasks | Importance | Frequency | Entry Job | Advancement |
|---|---|---|---|---|
| 8.1 Identify equipment and parts for a small cannery operation | | | | |
| 8.2 Receive and grade raw materials according to FDA or USDA regulations | | | | |
| 8.3 List steps of general canning procedure | | | | |
| 8.4 Process products according to Federal regulations | | | | |
| 8.5 Perform sealer test using USDA standards for seals | | | | |
| 8.6 Receive and store processed products in accordance with FDA regulations | | | | |
| 8.7 Sanitize each piece of equipment and the facility following FDA regulations | | | | |
| 8.8 Evaluate product for quality control according to FDA or USDA and company standards | | | | |
| 8.9 Identify causes and methods of prevention of spoilage of canned food products | | | | |
| 8.10 Explain the purpose and function of food additives | | | | |
| 8.11 Explain importance of water in canning operation | | | | |
| 8.12 Describe processing procedure/time for low-acid, acid, and high-acid foods | | | | |
| 8.13 Explain the importance of adequate heat treatment for low-acid canned foods in the destruction of botulism | | | | |

45

Please add any tasks that you wish if you feel something is missing or not adequately covered.

Please evaluate the following tasks using the criteria and numbers listed below

| | | | | |
|---|---|---|---|---|
| A | Importance of competency | 1 very | 2 somewhat | 3 not |
| B | Frequency of competency | 1 very | 2 average | 3 not |
| C | Is this skill necessary for entry-level employment? | 1 yes | 2 do not know | 3 no |
| D | Is this skill necessary for advancement? | 1 yes | 2 do not know | 3 no |

| Tasks | Importance | Frequency | Entry Job | Advancement |
|---|---|---|---|---|
| 9.1 Determine a milk collection route | | | | |
| 9.2 Describe procedure necessary to prepare milk for processing following the regulations in the Milk Ordinance and Code of the U.S. Public Health Service | | | | |
| 9.3 Operate milk processing equipment following federal regulations | | | | |
| 9.4 Standardize milk following federal regulations | | | | |
| 9.5 Prepare daily records and milk samples | | | | |
| 9.6 Calculate the amounts of ingredients needed to make various milk products following federal regulations | | | | |
| 9.7 Operate manufacturing equipment for selected milk products following federal regulations | | | | |
| 9.8 Package, label, and store manufactured fluid milk and milk products following federal regulations | | | | |
| 9.9 Receive fluid milk and milk products shipments | | | | |
| 9.10 Describe procedure for sanitizing and cleaning equipment according to federal regulations | | | | |
| 9.11 Evaluate product for quality control according to federal and company regulations | | | | |
| 9.12 Explain the purpose and functions of the Milk Marketing Board | | | | |
| 9.13 Identify and explain the grades and classes of milk according | | | | |

Please add any tasks that you wish if you feel something is missing or not adequately covered.

PROCESSING AND MARKETING

Please evaluate the following tasks using the criteria and numbers listed below. [redacted] E[redacted]

| | | | | |
|---|---|---|---|---|
| A | Importance of competency | 1 very | 2 somewhat | 3 not |
| B | Frequency of competency | 1 very | 2 average | 3 not |
| C | Is this skill necessary for entry-level employment? | 1 yes | 2 do not know | 3 no |
| D | Is this skill necessary for advancement? | 1 yes | 2 do not know | 3 no |

| Tasks | Importance | Frequency | Entry Job | Advancement |
|---|---|---|---|---|
| 10.1 Describe egg collection methods | | | | |
| 10.2 List factors that influence egg production | | | | |
| 10.3 Determine grade of egg according to USDA standards | | | | |
| 10.4 Determine size classification of egg | | | | |
| 10.5 Operate egg washing equipment following USDA regulations | | | | |
| 10.6 Explain purpose of oiling egg | | | | |
| 10.7 Select appropriate packaging materials following USDA regulations | | | | |
| 10.8 Receive egg shipments | | | | |
| 10.9 Determine proper storage temperature following USDA regulations | | | | |
| 10.10 Sanitize facilities | | | | |
| 10.11 Define terms used in the processing and marketing of shell eggs | | | | |
| 10.12 | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

Please add any tasks that you wish if you feel something is missing or not adequately covered.

49

Please evaluate the following tasks using the criteria and numbers listed below

| | | | | |
|---|---|---|---|---|
| A | Importance of competency | 1 very | 2 somewhat | 3 not |
| B | Frequency of competency | 1 very | 2 average | 3 not |
| C | Is this skill necessary for entry-level employment? | 1 yes | 2 do not know | 3 no |
| D | Is this skill necessary for advancement? | 1 yes | 2 do not know | 3 no |

| Tasks | Importance | Frequency | Entry Job | Advancement |
|---|---|---|---|---|
| 11.1 Identify major field crops grown and processed in Virginia | | | | |
| 11.2 Evaluate quality of field crop | | | | |
| 11.3 Classify and grade field crop following standards established in the Grain Standards Act | | | | |
| 11.4 Describe processing procedure for field crops following USDA regulations | | | | |
| 11.5 List appropriate USDA regulations for each field crop processing plant | | | | |
| 11.6 Inspect processed product according to USDA regulations | | | | |
| 11.7 Sanitize processing facilities following USDA standards | | | | |
| 11.8 Define terms used in insuring quality control for field crop processing | | | | |
| 11.9 | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

Please add any tasks that you wish if you feel something is missing or not adequately covered.

Please evaluate the following tasks using the criteria and numbers listed below

| | | | | |
|---|---|---|---|---|
| A | Importance of competency | 1 very | 2 somewhat | 3 not |
| B. | Frequency of competency | 1 very | 2 somewhat | 3 not |
| C. | Is this skill necessary for entry-level employment? | 1 yes | 2 do not know | 3 no |
| D. | Is this skill necessary for advancement? | 1 yes | 2 do not know | 3 no |

| | | | | | |
|---|---|---|---|---|---|
| 12.1 | Identify major products of tobacco processing | | | | |
| 12.2 | List the main types of tobacco used in processing and the major states providing each type | | | | |
| 12.3 | Describe the procedure to prepare tobacco for processing | | | | |
| 12.4 | List primary steps involved in processing tobacco into cigarettes | | | | |
| 12.5 | Describe quality controls for each step of the tobacco processing procedure | | | | |
| 12.6 | Explain the operation and general maintenance procedure for equipment used in tobacco processing | | | | |
| 12.7 | Explain the Food and Drug Administration guidelines to sanitize the facility | | | | |
| 12.8 | Describe federal regulations pertaining to the packaging and storing of tobacco products | | | | |
| 12.9 | Receive tobacco products shipments | | | | |
| 12.10 | List federal, state, and local taxing regulations for tobacco products | | | | |
| 12.11 | Define terms used in the processing and marketing of tobacco | | | | |
| 12.12 | | | | | |
| | | | | | |

[redacted] [redacted]leas[redacted]val[redacted] th[redacted]llo[redacted]g ta[redacted] usi[redacted]the[redacted]ter[redacted]and [redacted]ber[redacted]ste[redacted]llo[redacted] APPLYING GENERAL KNOWLEDGE OF AGRI[redacted]TUR[redacted]ROC[redacted]NG [redacted] [redacted] MARKETING

| | | | | |
|---|---|---|---|---|
| A | Importance of competency | 1 very | 2 somewhat | 3 not |
| B | Frequency of competency | 1 very | 2 somewhat | 3 not |
| C | Is this skill necessary for entry-level employment? | 1 yes | 2 do not know | 3 no |
| D | Is this skill necessary for advancement? | 1 yes | 2 do not know | 3 no |

| | | | | | |
|---|---|---|---|---|---|
| 13.1 | Practice safety in all activities, especially during operation of processing equipment | | | | |
| 13.2 | Demonstrate first aid skills | | | | |
| 13.3 | Maintain equipment for safe and healthful operation according to USDA standards | | | | |
| 13.4 | Explain the necessity for cleanliness and regular plant inspections | | | | |
| 13.5 | Use and care for storage equipment | | | | |
| 13.6 | Operate loading and unloading equipment | | | | |
| 13.7 | Define terms commonly used in agricultural processing and marketing | | | | |
| 13.8 | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

53

EXPLORING FUTURE TRENDS IN AGRICULTURAL PROCESSING AND MARKETING

Please evaluate the following content area and tasks using the criteria and numbers list below.

A Importance of this content area/Importance of this competency — 1 very — 2 somewhat — 3 not

B Does this competency adequately reflect a future trend in agricultural processing and marketing? — 1 yes — 2 do not know — 3 no

| Tasks | Importance | Reflection | | |
|---|---|---|---|---|
| 1. List future trends for processing Virginia agricultural products | | | | |
| 2. Describe processing procedure for grapes into wines | | | | |
| 3. Describe processing procedure for grains into alcohol fuels | | | | |
| 4. Explain importance of these processing areas to the future of Virginia agriculture, the state economy, and the national economy | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

54

63

64

Please add any tasks that you wish if you feel something is missing or not adequately covered.

APPENDIX G

CONTENT/CONCEPT AREAS

1. Choosing and entering a career in agricultural processing and marketing

2. Developing human relations skills for a career in agricultural processing and marketing

3. Managing an agricultural processing and marketing business

4. Advertising and promoting an agricultural processed product

5. Applying legal aspects of agricultural processing and marketing

6. Processing and marketing of meats and poultry

7. Processing and marketing of seafood

8. Processing and marketing of fruits and vegetables, including peanuts

9. Processing and marketing of milk and milk products

10. Processing and marketing of shell eggs

11. Insuring quality control in field crop processing (corn, grain, soybeans)

12. Processing and marketing of tobacco

13. Applying general knowledge of agricultural processing and marketing

[redacted] Choosing a Career in [redacted]

Please evaluate the following tasks using the criteria and numbers listed below — agricultural processing and marketing

| | | | | |
|---|---|---|---|---|
| A | Importance of Competency | 1 very | 2 somewhat | 3 not |
| B | Level of Difficulty | 1 very | 2 somewhat | 3 not |
| C | Would you teach this skill in the school facilities or find a suitable job experience for the student? | 1 school facility | 2 undecided | 3 on-the-job skill |
| D | At what level would you teach this competency? | 1 sophmore | 2 junior | 3 senior | 4 postsecondary |

| Tasks | Importance | Difficulty | Site | Level |
|---|---|---|---|---|
| 1.1 Describe the nature and scope of the agricultural processing and marketing industry | | | | |
| 1.2 Determine the relationship of the processing and marketing industry to the producer, consumer, total economy, and foreign trade | | | | |
| 1.3 Outline employment trends and opportunities | | | | |
| 1.4 Identify broad occupational areas and several specific jobs available within each area | | | | |
| 1.5 Identify educational or training requirements needed for employment in a specific job | | | | |
| 1.6 Compare wage rates with those of other businesses | | | | |
| 1.7 Identify personal long-range and short-term goals | | | | |
| 1.8 Select a tentative occupation | | | | |
| 1.9 Write a letter of application | | | | |
| 1.10 Complete a job application | | | | |
| 1.11 Construct a personal data sheet or resume | | | | |
| 1.12 Participate in a personal interview | | | | |
| 1.13 Write a follow-up letter of appreciation | | | | |
| 1.14 Complete a placement agreement | | | | |
| 1.15 | | | | |

Please add any tasks that you wish if you feel something is missing or not adequately covered.

Developing human relations skills for a career in agricultural processing and marketing

Please evaluate the following tasks using the criteria and numbers listed below

| | | | | |
|---|---|---|---|---|
| A | Importance of Competency | 1 very | 2 somewhat | 3 not |
| B | Level of Difficulty | 1 very | 2 somewhat | 3 not |
| C | Would you teach this skill in the school facilities or find a suitable job experience for the student? | 1 school facility | 2 undecided | 3 on-the-job skill |
| D | At what level would you teach this competency? | 1 sophmore | 2 junior | 3 senior | 4 postsecondary |

| Tasks | Importance | Difficulty | Site | Level |
|---|---|---|---|---|
| 2.1 Identify human relations skills required for entry into an agricultural processing and marketing job | | | | |
| 2.2 Recognize physical requirements needed in various aspects of the processing industry | | | | |
| 2.3 Demonstrate ability to follow instructions of supervisors | | | | |
| 2.4 Demonstrate willingness to work | | | | |
| 2.5 Conduct self-evaluation | | | | |
| 2.6 Demonstrate ability to communicate orally and in writing with employer, follow employees, supervisor, and customers | | | | |
| 2.7 Identify the basic human needs which play a part in worker motivation | | | | |
| 2.8 Make a decision, using the decision-making process | | | | |
| 2.9 Define and recognize the importance of etiquette | | | | |
| 2.10 Maintain effective relations with fellow employees, employer, and supervisor | | | | |
| 2.11 Maintain effective supervisory relations with employees | | | | |
| 2.12 List positive work attitudes | | | | |
| 2.13 Describe a typical agricultural processing work situation | | | | |
| 2.14 | | | | |
| | | | | |

Please add any tasks that you wish if you feel something is missing or not adequately covered.

[redacted] agi[redacted] and [redacted] mot[redacted] an [redacted]- [redacted] cultural processing and marketing business

Please evaluate the following tasks using the criteria and numbers listed below

| | | | | |
|---|---|---|---|---|
| A | Importance of Competency | 1 very | 2 somewhat | 3 not |
| B | Level of Difficulty | 1 very | 2 somewhat | 3 not |
| C | Would you teach this skill in the school facilities or find a suitable job experience for the student? | 1 school facility | 2 undecided | 3 on-the-job skill |
| D | At what level would you teach this competency? | 1 sophmore | 2 junior | 3 senior 4 postsecondary |

| Tasks | Importance | Difficulty | Site | Level |
|---|---|---|---|---|
| b. List the various methods of payment for work (hourly, piece, salary) | | | | |
| c. List several (monetary) fringe benefits in addition to normal wages or salaries | | | | |
| d. Explain how the credit policies of a company affect its business | | | | |
| e. Handle money | | | | |
| f. Account for money in cash registers and obtain additional change as needed | | | | |
| g. Borrow money | | | | |
| h. Identify facility needs for an ag pam business | | | | |
| i. Determine insurance needs | | | | |
| j. List real estate tax regulations | | | | |
| k. Establish retail prices for ag processed products | | | | |
| l. Analyze a business and rate financial soundness | | | | |
| m. Use hedging techniques to protect business profits | | | | |
| n. List taxation laws of a) individual ownership of a business | | | | |
| b) partnership c) business corporation | | | | |
| 3.4 Perform appropriate salesroom duties | | | | |
| a. Supervise sale of products retailed through processing | | | | |

Please add any tasks that you wish if you feel something is missing or not adequately covered.

Please evaluate the following tasks using the criteria and numbers listed below

Managing an agricultural processing and marketing business

| | | | | |
|---|---|---|---|---|
| A | Importance of Competency | 1 very | 2 somewhat | 3 not |
| B | Level of Difficulty | 1 very | 2 somewhat | 3 not |
| C | Would you teach this skill in the school facilities or find a suitable job experience for the student? | 1 school facility | 2 undecided | 3 on-the-job skill |
| D | At what level would you teach this competency? | 1 sophmore | 2 junior | 3 senior / 4 postsecondary |

| Tasks | Importance | Difficulty | Site | Level |
|---|---|---|---|---|
| 3.1 Determine the proper organization of a business | | | | |
| 3.2 Perform general office duties | | | | |
| a. Inventory processed products and supplies | | | | |
| b. Order merchandise sold in salesroom | | | | |
| c. Record information | | | | |
| d. Fill out shipping forms | | | | |
| e. Keep employment records | | | | |
| f. Prepare requisitions | | | | |
| g. Keep accurate records for an ag pam business | | | | |
| h. Write business letters | | | | |
| i. Illustrate importance of keeping an organized filing system | | | | |
| j. Keep an organized filing system | | | | |
| k. Interpret a financial statement | | | | |
| l. Apply principles of double-entry bookkeeping | | | | |
| m. Maintain field inspection reports | | | | |
| n. Demonstrate ability to adjust to changes in general work routine | | | | |
| 3.3 Develop a financial plan for an agricultural processing and marketing business | | | | |
| a. Prepare a complete income and expense budget | | | | |

Please add any tasks that you wish if you feel something is missing or not adequately covered.

Please evaluate the following tasks using the criteria and numbers listed below

Managing an agricultural processing and marketing business

A Importance of Competency — 1 very — 2 somewhat — 3 not

B Level of Difficulty — 1 very — 2 somewhat — 3 not

C Would you teach this skill in the school facilities or find a suitable job experience for the student? — 1 school facility — 2 undecided — 3 on-the-job skill

D At what level would you teach this competency? — 1 sophmore — 2 junior — 3 senior — 4 postsecondary

| Tasks | Importance | Difficulty | Site | Level |
|---|---|---|---|---|
| plants salesroom | | | | |
| b. Check equipment in salesroom and report malfunctions and service requirements to the maintenance engineer or plant superintendent | | | | |
| c. Supervise cleaning of salesroom and equipment | | | | |
| d. Supervise packaging, storage, and display of processed products | | | | |
| e. Assist with serving of retail customers | | | | |
| f. Contact customers and make sales | | | | |
| g. Demonstrate skills necessary for sales | | | | |
| h. Write out a sales ticket or receipt | | | | |
| 3.5 Demonstrate supervisory skills | | | | |
| a. Determine personnel requirements | | | | |
| b. Interview and select employees | | | | |
| c. Train new personnel | | | | |
| d. Supervise and schedule workers for the operation of the salesroom | | | | |
| e. Evaluate employees performance | | | | |
| f. Formulate daily objectives for organization and distribution of manpower, equipment, facilities, and goods | | | | |
| g. Lay out a weekly schedule of activities for an employee | | | | |

Please add any tasks that you wish if you feel something is missing or not adequately covered.

Managing an agricultural processing and marketing business

Please evaluate the following tasks using the criteria and numbers listed below

| | | | | |
|---|---|---|---|---|
| A | Importance of Competency | 1 very | 2 somewhat | 3 not |
| B | Level of Difficulty | 1 very | 2 somewhat | 3 not |
| C | Would you teach this skill in the school facilities or find a suitable job experience for the student? | 1 school facility | 2 undecided | 3 on-the-job skill |
| D | At what level would you teach this competency? | 1 sophmore | 2 junior | 3 senior | 4 postsecondary |

| Tasks | Importance | Difficulty | Site | Level |
|---|---|---|---|---|
| h. Maintain working conditions under existing contract agreements | | | | |
| i. Enforce employee safety regulations and standards | | | | |
| j. Instruct and direct work of employees in the production, packaging, and storing of processed products | | | | |
| 3.6 Receive and follow daily markets for a particular commodity | | | | |
| 3.7 Describe features and limitations of processed products | | | | |
| a. Describe uses of processed products | | | | |
| b. Describe and analyze markets available for products | | | | |
| 3.8 Select shipping method for various processed products | | | | |
| a. Explain advantages and disadvantages of different types of freight using freight rates and schedules | | | | |
| b. Determine most economical and efficient means of transportation | | | | |
| c. Inspect car or truck to determine acceptability | | | | |
| d. Recognize problems associated with transporting a) perishables b) semi-processed goods c) processed goods | | | | |
| e. Interpret shipping and postal rates and instructions | | | | |
| f. Prepare and load rail cars and trucks | | | | |
| g. Adjust cooling or freezing equipment (adjust temp. controls) to proper settings when necessary | | | | |

Please add any tasks that you wish if you feel something is missing or not adequately covered.

Please evaluate the following tasks using the criteria and numbers listed below

Managing an agricultural processing and marketing business

| | | | | |
|---|---|---|---|---|
| A | Importance of Competency | 1 very | 2 somewhat | 3 not |
| B | Level of Difficulty | 1 very | 2 somewhat | 3 not |
| C | Would you teach this skill in the school facilities or find a suitable job experience for the student? | 1 school facility | 2 undecided | 3 on-the-job skill |
| D | At what level would you teach this competency? | 1 sophmore | 2 junior | 3 senior 4 postsecondary |

| Tasks | Importance | Difficulty | Site | Level |
|---|---|---|---|---|
| h. Interpret freight rates for transportation of product | | | | |
| i. Prepare a bill of lading | | | | |
| 3.9 Develop a plan to organize a cooperative | | | | |
| a. Develop a plan for financing cooperative | | | | |
| b. List the various taxation laws of a cooperative | | | | |
| 3.10 | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

Please add any tasks that you wish if you feel something is missing or not adequately covered.

Please evaluate the following tasks using the criteria and numbers listed below

Advertising and promoting an agricultural processed product

| | | | | |
|---|---|---|---|---|
| A | Importance of Competency | 1 very | 2 somewhat | 3 not |
| B | Level of Difficulty | 1 very | 2 somewhat | 3 not |
| C | Would you teach this skill in the school facilities or find a suitable job experience for the student? | 1 school facility | 2 undecided | 3 on-the-job skill |
| D | At what level would you teach this competency? | 1 sophmore | 2 junior | 3 senior | 4 postsecondary |

| Tasks | Importance | Difficulty | Site | Level |
|---|---|---|---|---|
| 4.1 Demonstrate ability to project desirable image for the firm | | | | |
| 4.2 Develop an advertising campaign using various media | | | | |
| 4.3 Prepare an advertising calendar | | | | |
| 4.4 Develop an advertising budget | | | | |
| 4.5 Analyze advertising needs of the business | | | | |
| 4.6 Explain major concepts used in advertising and promoting a product | | | | |
| 4.7 List business promotion activities | | | | |
| 4.8 Plan and construct a basic display for a specific product | | | | |
| 4.9 Identify manufacturer's and wholesaler's promotional programs | | | | |
| 4.10 Identify and explain federal regulations pertaining to advertising of processed products | | | | |
| 4.11 | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

99

Please add any tasks that you wish if you feel something is missing or not adequately covered.

Please evaluate the following tasks using the criteria and numbers listed below

Applying [illegible] agricultural processing and marketing

| | | | | |
|---|---|---|---|---|
| A | Importance of Competency | 1 very | 2 somewhat | 3 not |
| B | Level of Difficulty | 1 very | 2 somewhat | 3 not |
| C | Would you teach this skill in the school facilities or find a suitable job experience for the student? | 1 school facility | 2 undecided | 3 on-the-job skill |
| D | At what level would you teach this competency? | 1 sophmore | 2 junior | 3 senior | 4 postsecondary |

| Tasks | Importance | Difficulty | Site | Level |
|---|---|---|---|---|
| 5.1 Explain the role of unions in an agricultural processing and marketing business | | | | |
| 5.2 List and explain the five major areas in the Fair Labor Standards Act | | | | |
| 5.3 Explain the U.S. Food, Drug, and Cosmetic Act as it relates to processing food products | | | | |
| 5.4 Describe standards for packaging and labeling food products | | | | |
| 5.5 List and describe other major federal regulations which apply to commercial processing and handling of food products | | | | |
| 5.6 List and describe major federal regulations which apply to the tobacco industry | | | | |
| 5.7 Interpret government regulations of warehousing | | | | |
| 5.8 Explain specific federal and state obligations which an employer has to an employee | | | | |
| 5.9 List employee incentives and fringe benefits | | | | |
| 5.10 | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

Please add any tasks that you wish if you feel something is missing or not adequately covered.

Processing and marketing meats and poultry

Please evaluate the following tasks using the criteria and numbers listed below

| | | | | |
|---|---|---|---|---|
| A | Importance of Competency | 1 very | 2 somewhat | 3 not |
| B | Level of Difficulty | 1 very | 2 somewhat | 3 not |
| C | Would you teach this skill in the school facilities or find a suitable job experience for the student? | 1 school facility | 2 undecided | 3 on-the-job skill |
| D | At what level would you teach this competency? | 1 sophmore | 2 junior | 3 senior / 4 postsecondary |

| Tasks | Importance | Difficulty | Site | Level |
|---|---|---|---|---|
| 6.1 Identify proper methods and procedures for handling animals/ poultry prior to slaughter | | | | |
| 6.2 Perform antemortem inspection conforming to USDA regulations | | | | |
| 6.3 Grade slaughter cattle, calves, lambs, hogs, and poultry | | | | |
| 6.4 Select/maintain equipment and supplies necessary for slaughter | | | | |
| 6.5 Demonstrate proper use of equipment in slaughtering process | | | | |
| 6.6 List safety practices that pertain to use of equipment | | | | |
| 6.7 Describe slaughtering process for cattle, calves, lambs, hogs, poultry according to USDA regulations | | | | |
| 6.8 Perform postmortem inspection of beef, veal, lamb, swine, and poultry carcasses conforming to USDA regulations | | | | |
| 6.9 Describe procedure to dress carcass for cattle, calves, lambs, hogs, and poultry | | | | |
| 6.10 Explain procedure to process carcass of cattle, calves, lambs, hogs, and poultry into retail cuts according to USDA regulations | | | | |
| 6.11 Inspect and grade beef, veal, lamb, mutton, pork, and poultry carcasses according to USDA regulations | | | | |
| 6.12 Identify various by-products of slaughtering processes and their uses | | | | |
| 6.13 Explain secondary processing procedure for ground and ready-to- | | | | |

Please add any tasks that you wish if you feel something is missing or not adequately covered.

Please evaluate the following tasks using the criteria and numbers listed below

Processing and marketing meats and poultry

| | | | | |
|---|---|---|---|---|
| A | Importance of Competency | 1 very | 2 somewhat | 3 not |
| B | Level of Difficulty | 1 very | 2 somewhat | 3 not |
| C | Would you teach this skill in the school facilities or find a suitable job experience for the student? | 1 school facility | 2 undecided | 3 on-the-job skill |
| D | At what level would you teach this competency? | 1 sophmore | 2 junior | 3 senior | 4 postsecondary |

| Tasks | Importance | Difficulty | Site | Level |
|---|---|---|---|---|
| serve meats, bacon, hams, sausages, etc. | | | | |
| 6.14 Describe various methods of meat and poultry preservation | | | | |
| 6.15 Package and label meat and poultry according to USDA regulations | | | | |
| 6.16 Receive meat and poultry shipments | | | | |
| a. Display and sell meats and poultry | | | | |
| b. Inventory meats and poultry | | | | |
| c. Purchase meats and poultry supplies | | | | |
| d. Determine proper storage techniques | | | | |
| 6.17 Describe procedures to sanitize meat slaughter and poultry | | | | |
| slaughter facilities according to USDA regulations (Sanitation | | | | |
| Handbook) | | | | |
| 6.18 Complete a sanitation report in triplicate in accordance with | | | | |
| the Sanitation Handbook of the USDA | | | | |
| 6.19 Describe the procedure to slaughter and process cattle and lambs | | | | |
| according to Jewish law | | | | |
| 6.20 Define terms used in the processing and marketing of meat and | | | | |
| poultry | | | | |
| 6.21 | | | | |
| | | | | |
| | | | | |

Please add any tasks that you wish if you feel something is missing or not adequately covered.

Please evaluate the following tasks using the criteria and numbers listed below

Processing and marketing seafood

| | | | | |
|---|---|---|---|---|
| A | Importance of Competency | 1 very | 2 somewhat | 3 not |
| B | Level of Difficulty | 1 very | 2 somewhat | 3 not |
| C | Would you teach this skill in the school facilities or find a suitable job experience for the student? | 1 school facility | 2 undecided | 3 on-the-job skill |
| D | At what level would you teach this competency? | 1 sophmore | 2 junior | 3 senior | 4 postsecondary |

| Tasks | Importance | Difficulty | Site | Level |
|---|---|---|---|---|
| 7.1 Identify various types of fin fish and shell fish common to Virginia | | | | |
| 7.2 Receive seafood shipment | | | | |
| a. Display and sell seafood | | | | |
| b. Inventory seafood | | | | |
| c. Purchase seafood supplies | | | | |
| d. Determine proper storage techniques | | | | |
| 7.3 Identify various types of fish cuts | | | | |
| 7.4 Describe procedure to prepare fish for processing into retail cuts | | | | |
| 7.5 Identify by-products of fish processing and their uses | | | | |
| 7.6 Package and label fish according to U.S. Department of Commerce (USDC) regulations | | | | |
| 7.7 Describe various methods of fish preservation | | | | |
| 7.8 Describe procedure to sanitize facilities, according to federal, state, and local regulations | | | | |
| 7.9 Inspect and grade fish according to USDC regulations | | | | |
| 7.10 Describe USDC regulations pertaining to the processing of seafood | | | | |
| 7.11 Describe the various fishery inspections available to a processing plant | | | | |
| 7.12 Define terms used in the processing and marketing of seafood | | | | |

Please add any tasks that you wish if you feel something is missing or not adequately covered.

Please evaluate the following tasks using the criteria and numbers listed below

Processing and marketing fruits vegetables, including peanuts

| | | | | |
|---|---|---|---|---|
| A | Importance of Competency | 1 very | 2 somewhat | 3 not |
| B | Level of Difficulty | 1 very | 2 somewhat | 3 not |
| C | Would you teach this skill in the school facilities or find a suitable job experience for the student? | 1 school facility | 2 undecided | 3 on-the-job skill |
| D | At what level would you teach this competency? | 1 sophmore | 2 junior | 3 senior | 4 postsecondary |

| Tasks | Importance | Difficulty | Site | Level |
|---|---|---|---|---|
| 8.1 Identify equipment and parts for a small cannery operation | | | | |
| 8.2 Receive and grade raw materials according to FDA or USDA regulations | | | | |
| 8.3 List steps of general canning procedure | | | | |
| 8.4 Process products according to Federal regulations | | | | |
| 8.5 Perform sealer test using USDA standards for seals | | | | |
| 8.6 Receive and store processed products in accordance with FDA regulations | | | | |
| 8.7 Sanitize each piece of equipment and the facility following FDA regulations | | | | |
| 8.8 Evaluate product for quality control according to FDA or USDA and company standards | | | | |
| 8.9 Identify causes and methods of prevention of spoilage of canned food products | | | | |
| 8.10 Explain the purpose and function of food additives | | | | |
| 8.11 Explain importance of water in canning operation | | | | |
| 8.12 Describe processing procedure/time for low-acid, acid, and high-acid foods | | | | |
| 8.13 Explain the importance of adequate heat treatment for low-acid canned foods in the destruction of botulism | | | | |

Please add any tasks that you wish if you feel something is missing or not adequately covered.

Processing and marketing fruits and vegetables, including peanuts

Please evaluate the following tasks using the criteria and numbers listed below

| | | | | |
|---|---|---|---|---|
| A | Importance of Competency | 1 very | 2 somewhat | 3 not |
| B | Level of Difficulty | 1 very | 2 somewhat | 3 not |
| C | Would you teach this skill in the school facilities or find a suitable job experience for the student? | 1 school facility | 2 undecided | 3 on-the-job skill |
| D | At what level would you teach this competency? | 1 sophmore | 2 junior | 3 senior | 4 postsecondary |

| Tasks | Importance | Difficulty | Site | Level |
|---|---|---|---|---|
| 8.14 Define terms used in the processing and marketing of fruits and vegetables | | | | |
| 8.15 | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |







Please add any tasks that you wish if you feel something is missing or not adequately covered.

Processing and marketing milk and milk products

Please evaluate the following tasks using the criteria and numbers listed below

| | | | | |
|---|---|---|---|---|
| A | Importance of Competency | 1 very | 2 somewhat | 3 not |
| B | Level of Difficulty | 1 very | 2 somewhat | 3 not |
| C | Would you teach this skill in the school facilities or find a suitable job experience for the student? | 1 school facility | 2 undecided | 3 on-the-job skill |
| D | At what level would you teach this competency? | 1 sophmore | 2 junior | 3 senior | 4 postsecondary |

| Tasks | Importance | Difficulty | Site | Level |
|---|---|---|---|---|
| 9.1 Determine a milk collection route | | | | |
| 9.2 Describe procedure necessary to prepare milk for processing following the regulations in the Milk Ordinance and Code of the U.S. Public Health Service | | | | |
| 9.3 Operate milk processing equipment following federal regulations | | | | |
| 9.4 Standardize milk following federal regulations | | | | |
| 9.5 Prepare daily records and milk samples | | | | |
| 9.6 Calculate the amounts of ingredients needed to make various milk products following federal regulations | | | | |
| 9.7 Operate manufacturing equipment for selected milk products following federal regulations | | | | |
| 9.8 Package, label, and store manufactured fluid milk and milk products following federal regulations | | | | |
| 9.9 Receive fluid milk and milk products shipments | | | | |
| 9.10 Describe procedure for sanitizing and cleaning equipment according to federal regulations | | | | |
| 9.11 Evaluate product for quality control according to federal and company regulations | | | | |
| 9.12 Explain the purpose and functions of the Milk Marketing Board | | | | |
| 9.13 Identify and explain the grades and classes of milk according | | | | |

Please add any tasks that you wish if you feel something is missing or not adequately covered.

Processing and marketing milk and milk products

Please evaluate the following tasks using the criteria and numbers listed below

| | | | | |
|---|---|---|---|---|
| A | Importance of Competency | 1 very | 2 somewhat | 3 not |
| B | Level of Difficulty | 1 very | 2 somewhat | 3 not |
| C | Would you teach this skill in the school facilities or find a suitable job experience for the student? | 1 school facility | 2 undecided | 3 on-the-job skill |
| D | At what level would you teach this competency? | 1 sophmore | 2 junior | 3 senior / 4 postsecondary |

| Tasks | Importance | Difficulty | Site | Level |
|---|---|---|---|---|
| to federal regulations. | | | | |
| 9.14 Define terms used in the processing and marketing of milk and | | | | |
| milk products | | | | |
| 9.15 | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |







Please add any tasks that you wish if you feel something is missing or not adequately covered.

Please evaluate the following tasks using the criteria and numbers listed below

Processing and marketing of shell eggs

| | | | | |
|---|---|---|---|---|
| A | Importance of Competency | 1 very | 2 somewhat | 3 not |
| B | Level of Difficulty | 1 very | 2 somewhat | 3 not |
| C | Would you teach this skill in the school facilities or find a suitable job experience for the student? | 1 school facility | 2 undecided | 3 on-the-job skill |
| D | At what level would you teach this competency? | 1 sophmore | 2 junior | 3 senior / 4 postsecondary |

| Tasks | | Importance | Difficulty | Site | Level |
|---|---|---|---|---|---|
| 10.1 | Describe egg collection methods | | | | |
| 10.2 | List factors that influence egg production | | | | |
| 10.3 | Determine grade of egg according to USDA standards | | | | |
| 10.4 | Determine size classification of egg | | | | |
| 10.5 | Operate egg washing equipment following USDA regulations | | | | |
| 10.6 | Explain purpose of oiling egg | | | | |
| 10.7 | Select appropriate packaging materials following USDA regulations | | | | |
| 10.8 | Receive egg shipments | | | | |
| 10.9 | Determine proper storage temperature following USDA regulations | | | | |
| 10.10 | Sanitize facilities | | | | |
| 10.11 | Define terms used in the processing and marketing of shell eggs | | | | |
| 10.12 | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

Please add any tasks that you wish if you feel something is missing or not adequately covered.

Please evaluate the following tasks using the criteria and numbers listed below

Insuring quality control in field crop processing (corn, grain, soybeans)

| | | | | |
|---|---|---|---|---|
| A | Importance of Competency | 1 very | 2 somewhat | 3 not |
| B | Level of Difficulty | 1 very | 2 somewhat | 3 not |
| C | Would you teach this skill in the school facilities or find a suitable job experience for the student? | 1 school facility | 2 undecided | 3 on-the-job skill |
| D | At what level would you teach this competency? | 1 sophmore | 2 junior | 3 senior | 4 postsecondary |

| Tasks | Importance | Difficulty | Site | Level |
|---|---|---|---|---|
| 11.1 Identify major field crops grown and processed in Virginia | | | | |
| 11.2 Evaluate quality of field crop | | | | |
| 11.3 Classify and grade field crop following standards established in the Grain Standards Act | | | | |
| 11.4 Describe processing procedure for field crops following USDA regulations | | | | |
| 11.5 List appropriate USDA regulations for each field crop processing plant | | | | |
| 11.6 Inspect processed product according to USDA regulations | | | | |
| 11.7 Sanitize processing facilities following USDA standards | | | | |
| 11.8 Define terms used in insuring quality control for field crop processing | | | | |
| 11.9 | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

Please add any tasks that you wish if you feel something is missing or not adequately covered.

[redacted] ess [redacted] and [redacted] ket [redacted] of [redacted] acc [redacted]

Please evaluate the following tasks using the criteria and numbers listed below

| | | | | |
|---|---|---|---|---|
| A | Importance of Competency | 1 very | 2 somewhat | 3 not |
| B | Level of Difficulty | 1 very | 2 somewhat | 3 not |
| C | Would you teach this skill in the school facilities or find a suitable job experience for the student? | 1 school facility | 2 undecided | 3 on-the-job skill |
| D | At what level would you teach this competency? | 1 sophmore | 2 junior | 3 senior | 4 postsecondary |

| Tasks | | Importance | Difficulty | Site | Level |
|---|---|---|---|---|---|
| 12.1 | Identify major products of tobacco processing | | | | |
| 12.2 | List the main types of tobacco used in processing and the major states providing each type | | | | |
| 12.3 | Describe the procedure to prepare tobacco for processing | | | | |
| 12.4 | List primary steps involved in processing tobacco into cigarettes | | | | |
| 12.5 | Describe quality controls for each step of the tobacco processing procedure | | | | |
| 12.6 | Explain the operation and general maintenance procedure for equipment used in tobacco processing | | | | |
| 12.7 | Explain the Food and Drug Administration guidelines to sanitize the facility | | | | |
| 12.8 | Describe federal regulations pertaining to the packaging and storing of tobacco products | | | | |
| 12.9 | Receive tobacco products shipments | | | | |
| 12.10 | List federal, state, and local taxing regulations for tobacco products | | | | |
| 12.11 | Define terms used in the processing and marketing of tobacco | | | | |
| 12.12 | | | | | |
| | | | | | |

Please add any tasks that you wish if you feel something is missing or not adequately covered.

77

Please evaluate the following tasks using the criteria and numbers listed below

Applying general knowledge of agricultural processing and marketing

| | | | | |
|---|---|---|---|---|
| A | Importance of Competency | 1 very | 2 somewhat | 3 not |
| B | Level of Difficulty | 1 very | 2 somewhat | 3 not |
| C | Would you teach this skill in the school facilities or find a suitable job experience for the student? | 1 school facility | 2 undecided | 3 on-the-job skill |
| D | At what level would you teach this competency? | 1 sophmore | 2 junior | 3 senior 4 postsecondary |

| Tasks | Importance | Difficulty | Site | Level |
|---|---|---|---|---|
| 13.1 Practice safety in all activities, especially during operation of processing equipment | | | | |
| 13.2 Demonstrate first aid skills | | | | |
| 13.3 Maintain equipment for safe and healthful operation according to USDA standards | | | | |
| 13.4 Explain the necessity for cleanliness and regular plant inspections | | | | |
| 13.5 Use and care for storage equipment | | | | |
| 13.6 Operate loading and unloading equipment | | | | |
| 13.7 Define terms commonly used in agricultural processing and marketing | | | | |
| 13.8 | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

Please add any tasks that you wish if you feel something is missing or not adequately covered.

EXPLORING FUTURE TRENDS IN AGRICULTURAL PROCESSING AND MARKETING

Please evaluate the following content area and tasks using the criteria and numbers list below.

A Importance of this content area/Importance of this competency — 1 very, 2 somewhat, 3 not

B Does this competency adequately reflect a future trend in agricultural processing and marketing? — 1 yes, 2 do not know, 3 no

| Tasks | Importance | Reflection | | |
|---|---|---|---|---|
| 1. List future trends for processing Virginia agricultural products | | | | |
| 2. Describe processing procedure for grapes into wines | | | | |
| 3. Describe processing procedure for grains into alcohol fuels | | | | |
| 4. Explain importance of these processing areas to the future of Virginia agriculture, the state economy, and the national economy | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

Please add any tasks that you wish if you feel something is missing or not adequately covered.

79

APPENDIX H

REPRESENTATIVE
OCCUPATIONS IN AGRICULTURAL PROCESSING AND MARKETING

| | |
|---|---|
| 1. Butcher, retail | 316.681-010 |
| 2. Carver, retail | 316.661-010 |
| 3. Butcher, fish | 525.684-014 |
| 4. Salesclerk, food | 290.477-018 |
| 5. Fish processing | 525.134-010 |
| 6. Food and Drug inspector | 168.267-042 |
| 7. Supervisor, dairy processing | 529.131-014 |
| 8. Sanitarian | 529.137-014 |
| 9. Inspector: grain mill products | 529.387-026 |
| 10. Cannery worker | 529.686-014 |
| 11. Egg Candler | 529.687-074 |
| 12. Inspector: agricultural commodities | 168.287-010 |
| 13. Plant supervisor: tobacco | 529.137-026 |
| 14. Tobacco grader | 400.687.010 |
| 15. Shipping and receiving clerk (in any processing facility) | 222.387-010 |
| 16. Meat Inspector | 316.684-018 |

APPENDIX I

BALANCE SHEET

| | | Budget Requested from State | Actual Expenditures | Local Contributions |
|---|---|---|---|---|
| I. | Salaries | | | |
| | Secretary<br>Linda B. Heatwole<br>(120 hrs.@$6.70/hr.) | $ 804.00 | $ 804.00 | $ 0.00 |
| | Fringe Benefits (6.7%) | 53.86 | 53.86 | 0.00 |
| | SUBTOTAL SALARIES | $ 857.86 | $ 857.86 | $ 0.00 |
| II. | Contractual Services | | | |
| | A. Curriculum Development | $ 2,000.00 | $ 2,050.00 | $ 0.00 |
| | B. Copying | 247.14 | 118.40 | 200.00 |
| | C. Equipment Rental | 900.00 | 837.48 | 0.00 |
| | D. Meals for Advisory Meetings | 100.00 | 81.33 | 0.00 |
| | SUBTOTAL CONTRACTUAL SERVICES | $ 3,247.14 | $ 3,087.21 | $ 200.00 |
| III. | Materials and Supplies | | | |
| | A. Office Supplies | $ 75.00 | $ 76.00 | $ 200.00 |
| | B. Postage | 0.00 | 0.00 | 100.00 |
| | SUBTOTAL MATERIALS AND SUPPLIES | $ 75.00 | $ 76.00 | $ 300.00 |
| IV. | Travel | | | |
| | A. Project Advisory Committee | $ 125.00 | $ 193.79 | $ 0.00 |
| | B. Project Director | 50.00 | 0.00 | 0.00 |
| | C. Project Curriculum Specialist | 275.00 | 244.00 | 0.00 |
| | SUBTOTAL TRAVEL | $ 450.00 | $ 437.79 | $ 0.00 |
| V. | Other Related Expenses | $ 0.00 | $ 0.00 | $ 0.00 |
| | SUBTOTAL OTHER RELATED EXPENSES | $ 0.00 | $ 0.00 | $ 0.00 |
| VI. | Indirect Costs | | | |
| | 8% of $4,630.00 | $ 370.00 | $ 356.71 | $ 0.00 |
| | SUBTOTAL INDIRECT COSTS | $ 370.00 | $ 356.71 | $ 0.00 |
| | TOTAL | $ 5,000.00 | $ 4,815.57 | $ 500.00 |